

PARAHO DEVELOPMENT CORPORATION

December 22, 1982

Mr. D. W. Hedberg State of Utah Natural Resources & Energy Oil, Gas & Mining 4241 State Office Building Salt Lake City, UT 84114



DIVISION OF OIL GAS & MINING

Dear Wayne:

We have obtained the information that the Utah Division of Oil, Gas and Mining required concerning reclamation bonding for the Paraho-Ute project.

For the first segment of operations, Site Development, we will construct the following: off-site Rights-of-Way; the construction camp area in Section 6; and access roads, cut-and-fill operations, along with foundations for the temporary construction buildings in Section 32. Site Development will disturb 318 acres of land, install about 224,000 square yards of paved surfaces, and construct foundations for 22 buildings having a composite area of 22,875 square yards. Using 1983 cost factors of \$6,700/acre reclamation, \$3.00/square yard of asphalt break-up, and \$10.00/square yard for foundation break-up, the reclamation costs for this segment would be \$2,983,000. Details of these data are presented in Attachment A along with certain maps and tables from Paraho's Conditional Use Permit.

The bachelor quarters are modular design erected on all-weather wood foundations. The common buildings and temporary construction facilities are pre-engineered construction erected on concrete slabs. All buildings will be removed and reused. Only the abovementioned concrete slab foundations will be subject to reclamation. We have requested a letter from the Daniel Construction Company that discusses these matters based upon their experience.

Also, we have summarized projected reclamation costs for the first four segments of the Paraho-Ute project in 1983 dollars and as-spent dollars (see Attachment C). These costs indicate the as-spent costs range from about \$3 million for the final segment in 1983 to more than \$16 million after full operations in 1994.

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Finally, Paraho plans to provide the Division suitable assurance in the form of a bond for the reclamation of the Site Development segment. This bond would be posted prior to beginning any field work. Details of the bonding procedure will be provided by MR. E. R. Davis, Vice President and Chief Financial Officer for Paraho Development Corporation.

We trust this information meets your needs and look forward to attending the Board meeting on December 31, 1982.

Merry Christmas and a Happy New Year!

Sincerely,

Robert N. Heistand Vice President,

Environmental Affairs

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ATTACHMENT A

SITE DEVELOPMENT



DIVISION OF OIL GAS & MINING

SITE PREPARATION

RECLAMATION DETAILS

1.	Construct off-site power, water, and roads R-O-W's	125 acres disturbed 61,500 yard ² paving	\$800,000 184,500
2.	Construct camp area, roads, parking, and foundations	108 acres disturbed 90,222 yd paving 8,384 yd foundations	691,200 270,666 100,608
3.	Perform cut-and-fill at plant site; construct roads, parking and foundations	85 acres disturbed 72,400 yd ² paving 14,491 yd ² foundations	544,000 217,200 173,892

TOTAL

\$2,982,066

CONSTRUCTION CAMP BUILDINGS * FOUNDATION DATA

BUILDING	DIMENSIONS (ft)	Area (yd ²)	$\frac{\text{Volume**}}{(\text{yd}^3)}$
Training	87.5 x 100	972	211
Maint/Serv	45 x 50	250	66
Water Trtmt	30 x 50	167	49
Node Centers 2 each	100 x 150	3,333	685
Community Center	125 x 175	2,430	483
Admin	87.5 x 100	972	211
R V Nodes	26 X 30	260	87
3 each		TOTAL 8,384	1,792

^{*} Table 2-2 Conditional Use Permit Construction Camp, Dec.1982

^{**} Six-inch slabs plus foundations (8-12" x 3½')

TEMPORARY CONSTRUCTION BUILDINGS* FOUNDATION DATA

BUILDING	DIMENSIONS (ft)	AREA (yd²)	VOLUME (yd ³)**
Admin	80 x 125	1,111	238
Personnel	50 x 60	333	84
Brass Alley 2 each	15 x 20	67	29
Craft Shop	150 x 200	3,333	646
Warehouse 3 each	125 x 160	6,667	1,333
Equip Maint	60 x 100	667	263
Area Mgr Off 3 each	70 x 100	2,333	521
J each	7	TOTAL 14,491	3,114

^{*} Table 2-2 Conditional Use Permit Construction Camp, Dec.1982

^{**} Six-inch slabs plus foundations (8-12" x 3½')

PAVING AND SIDEWALKS*

ITEM	DIMENSIONS	AREA (YD ²)
Offsite-Main Access	2.1 mi x 34 ft	41,900
Offsite Camp Access	2.1 mi x 24 ft	29,600
Onsite Camp Roads	0.9 mi x 24 ft	12,700
Onsite Connecting Road	2.3 mi x 24 ft	32,400
Camp Parking, Sidewalks, Basketball Courts, etc.		85,000
Site Parking and Sidewalks		40,000
	TOTAL	241,600

^{*}Same as before

Table 2-2

Paraho-Ute Project Construction Camp Community Buildings

ı.	COM	MON BUILTINGS	APPROXIMATE SQ. FOOTAGE
	l.	Training	8,750
	2.	Maintenance and Service	2,250
	3.	Water Treatment	1,500
	4.	Primary Node Center	15,000
		Kitchen, Food Service Dining Restroors Storage, Hall	
	5.	Secondary Node	15,000
		Dining Restroors Storage, Hall Telephores	
	6.	Community Center	21,875
		Game Rocms Commissary Weight/Ixercise Gymnasitm Telephores Art/Craft Television Rooms Lounge/Ear Sandwich Bar Postal Library Barber Shop Laundry Restrooms Storage Hallways Outside Picnic Area Bank/Check Cashing	

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Table 2-2, cont.

СОМ	MON BUILDINGS	 ROXIMATE FOOTAGE
7.	Administrative Services Buildir Data Processing Reception Ambulance Bay Fire Truck Bay First Aid Security Caterer Office Camp Manager Office Chaplain Office Chapel Hallway Storage Restrooms	8,750
8.	RV Node Center (3) Vending Area Showers/Toilet Laundry Facilities	780

II.	RESIDENCES			FT. PER	# OF BUILDINGS
	1.	Craft		154	45
	2.	Supervisory		180	8
	3.	Guest		180	1
	4.	Recreational Vehicle Spaces*			200

* Initially, 50 - 75 spaces will be developed with additional spaces provided as r quired.

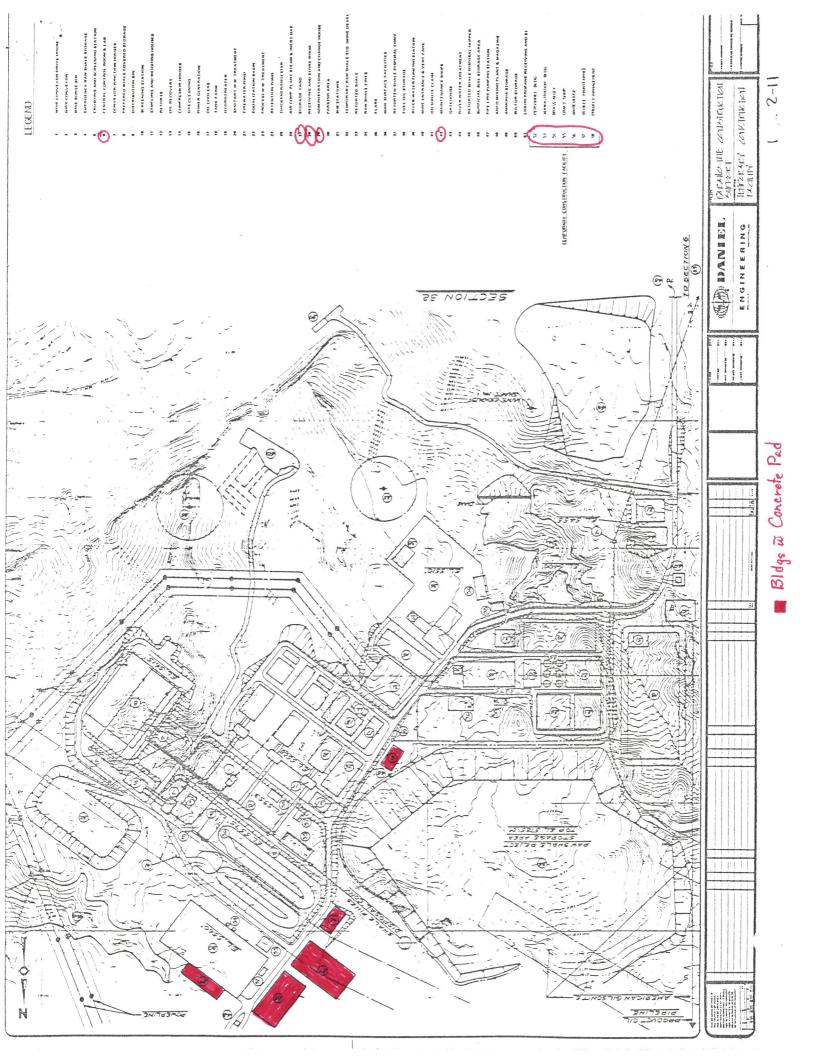
Bldgs w Concrete Pads

Table 2-3
Paraho-Ute Project
Temporary Construction Buildings

Building	Number Req'd	- Type	Size	Services
Administration	1	Pre-Engr Metal	10,000	PW & S
Personnel	1	16	3,000	PW & S
Brass Alley	2	11	300	
Craft Shop & Quality Control	1	н	30,000	
Warehouse	3	и	20,000	
Equip Maintenance	1	11	6,000	
Area Mgr's Office	3	11	7,000	PW & S
Mobile Office	6	Trailer	500	
Toilet Trailers	10	Trailer	500	PW & S

PW - Potable Water

S - Sewer



ATTACHMENT C COST SUMMARY PARAHO-UTE RECLAMATION

		ACTIVITIES		ESTIMATED COSTS	
	DISTURBED	PAVED			SAND \$)
	ACRES	SUR <u>FAC</u> ES*	FOUNDATIONS*	1983	AS-SPENT***
Site Preparation (1983)	318	224	23	2,983	2,983
Complete Phase I (1984-1986)	418	300	100	4,775	6,087
Start Full Operations (1987-1988)	571	300	200	6,954	10,218
Complete Full Operations (1989-1994)	550	225	225	6,895	16,076

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^{*}in thousand square yards
**\$6,700/acre; \$3.00/square yard, paving break-up; \$12/square yard, foundation break-up

^{***}inflation at 8%/year